Brit. J. vener. Dis. (1969), **45**, 170.

CORRESPONDENCE

SYPHILIS IN THE OWL MONKEY

To the Editor of the *British Journal of Venereal Diseases:*

SIR—Elsas, Lawton Smith, Israel, and Gager (1968) endeavour to relate syphilis *d'emblée* in the owl monkey to acquired syphilis in the adult human being. They discuss the large solitary, crusted, indurated, indolent, darkfield positive skin lesion, which they describe in relation to either secondary or tertiary syphilis as we understand these conditions in man; and they suggest alternative theories. Either the treponemata from human chancres are more virulent than the Nichols strain or the shorter life span of the owl monkey has the effect of compressing the natural history of syphilis in this animal.

A comparison between these experiments and human acquired syphilis is not really valid because (*a*) the infection was caused by intravenous inoculation which would approximate to congenital syphilis in humans where skin lesions (and others) if they occur in neonatal life are apt to be severe as in the case of the owl monkey in question and (*b*) the infected individual was not, after all, either a newborn baby or an adult human.

In a previous contribution to your journal (Wigfield, 1965) I ventured to suggest that the various skin lesions in human acquired syphilis might best be ascribed to a balance between the sensitivity of tissues to treponemata on the one hand and the degree of humoral antibody on the other. Treponemata, in theory, can only be active when humoral antibody is low or non-existent. It was suggested that the reaction they produce is a "normo-syphiloma" as in the chancre, or a "hypo-syphiloma" as in a secondary macule, or a "hyper-syphiloma" as in a gumma, depending on the sensitivity of the tissues involved.

I would suggest that the owl monkey's lesion was a severe "normo-syphiloma" (resembling a large chancre more than a gumma) occurring in an animal whose defence mechanism leaves much to be desired, witness the eye lesion and the slow serological reactivity. Apart from this the handicap of an intravenous inoculation gave the owl monkey an unfair start.

Yours etc., A. S. WIGFIELD.

THE ROYAL HOSPITAL,
WOLVERHAMPTON, STAFFS.
February 18, 1969.

To the Editor of the *British Journal of Venereal Diseases:*

SIR—Thanks so much for allowing me to see Dr. Wigfield's letter. I would be reluctant to describe as a chancre a skin lesion which developed eight months after inoculation with *Treponema pallidum* at a different site, and which slowly progressed during nearly a year of follow-up. The Armed Forces Institute of Pathology reviewed the histopathology of the lesion reported by Elsas and others (1968) and considered it "consistent with condyloma latum". This slide was filed in the AFIP Registry under AFIP Accession No. 1276253.

I also could not agree that this monkey showed "slow serological reactivity", since this was one of the most sero-positive owl monkeys we have observed in our laboratory, and showed as high a reagin titre as we have seen in this species. The fact that the lesion was on the monkey's *back* now seems to be significant, as pointed out by Clark (1968) in his recent study of early syphilis in *Aötus trivirgatus,* and by Sepetjian, M., Tissot Gudrraz, Salussola, D., Thivolet, J., and Monier, J. C. (1968), in a study comparing three treponemes in monkeys. It is certain from Dr. Wigfield's interesting remarks, however, and the above-mentioned references, that much more research is needed in experimental treponematoses in primates.

Sincerely,
J. LAWTON SMITH.

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March 13, 1969.

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